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(54) Title: SYSTEM, METHOD AND SOFTWARE ARRANGEMENT UTILIZING A MULTI-STRIP PROCEDURE THAT CAN BE APPLIED TO GENE CHARACTERIZATION USING DNA-ARRAY DATA

(57) Abstract: A system, method and software arrangement are provided that use a fast adaptive multiscale procedure to characterize a random set of points spanning a high dimensional Euclidean space, and concentrated around special lower dimensional subsets. The procedure can be adapted to analyze gene expression data from microarray experiments, and may be applied generally to existing datasets without regard to whether a particular model exists to otherwise describe the dataset. The procedure accordingly can be used for identifying and mathematically isolating stable sets of data points in a given dataset from those in the same dataset that deviate from a stable model under various conditions.